

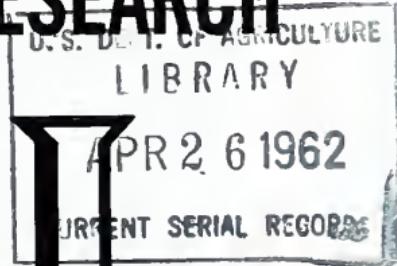
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# **SCIENTIFIC CAREERS IN ANIMAL DISEASE AND PARASITE RESEARCH**



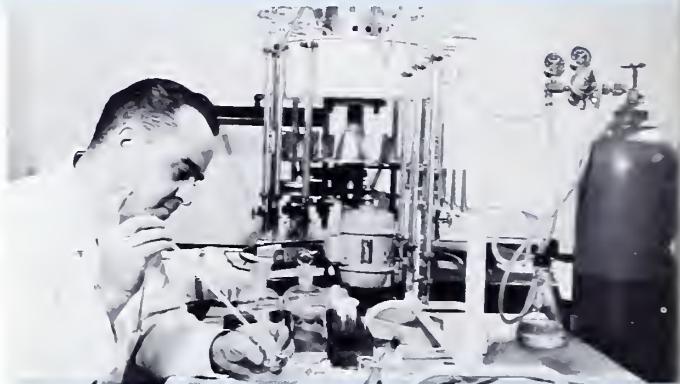
**Miscellaneous Publication No. 852  
Agricultural Research Service  
U.S. Department of Agriculture**

# SCIENTIFIC CAREERS in Animal Disease and Parasite Research

Are you qualified to participate in a research program designed to protect livestock from diseases and parasites? Are you taking college courses that will qualify you?

If so, you may be interested in employment in the Agricultural Research Service (ARS) of the U.S. Department of Agriculture. In ARS, the Animal Disease and Parasite Research Division uses veterinarians, microbiologists, parasitologists, chemists and physicists, pathologists and cytologists, and physiologists.

This leaflet names the fields of research in which the Animal Disease and Parasite Research Division is active. It also lists salaries and job benefits, summarizes qualification requirements, and tells how to get additional information.



N-16770  
Protozoologist studies microscopic parasites.



N-13069  
Veterinarian injects steer with experimental grub-killing systemic chemical.

## **Research is conducted in these fields:**

- **DOMESTIC AND FOREIGN ANIMAL DISEASES.** Development of methods of prevention, control, and eradication of existing and potential livestock disease problems. *This work requires—*

Veterinarians, microbiologists, pathologists and cytologists, biochemists and biophysicists, physiologists and immunologists.

- **FARM ANIMAL AND POULTRY PARASITES.** Development of methods of prevention control, and eradication of parasites of livestock and poultry. *This work requires—*

Veterinarians, parasitologists, pathologists and cytologists, biochemists and biophysicists, and immunologists.

## **Nature of the work**

- **VETERINARIAN.** Performs research on livestock diseases, their etiology, antibody response of the host, clinical and pathological response of the host, immunological response of the host, effect of therapy upon the host and causative agent, methods of transmission, and reservoirs of infection.

- **MICROBIOLOGIST.** Performs research on bacteria, viruses, and other micro-organisms, their identification, classification, pathogenicity, antigenicity, metabolism, nutritional requirements, resistance to natural and artificial environment, preservation, and geographical distribution.

● **PARASITOLOGIST.** Performs research on identification and geographical distribution of parasites affecting animals, mode of transmission of parasitic diseases, life cycle of parasites, metabolism and nutritional requirements of parasites, resistance of parasites to natural and artificial requirements, antigenicity, and immunogenicity.

● **BIOCHEMIST AND BIOPHYSICIST.** Perform research on: the chemical and physical properties of the major components of micro-organisms with emphasis on those that are concerned with immunity, and for use in diagnostic tests; the nature of enzymes concerned with growth and metabolism of disease organisms; the ultrastructures of disease agents and chemical changes produced in animals as a result of disease or in the course of development of immunity.

## **EMPLOYMENT INFORMATION**

Most of these positions are in the Federal competitive civil service. Appointments are made from lists of persons who qualify through appropriate civil service examinations. Some examinations require written tests; others require an evaluation of your education, training, and experience.

You may obtain announcements of civil service examinations, and application forms, from your college placement officer or from the Personnel Division, Agricultural Research Service, U.S. Department of Agriculture, Washington 25, D.C. The announcement will give detailed information on employment requirements.

## Qualifications and salaries

The following summary applies to requirements for filling most of the professional research positions.

Grade	Minimum entrance salary	Minimum requirements
GS-5.....	\$4,345.....	Bachelor's degree in appropriate field, with specific courses as described in the examination announcement, and pass a written test.
GS-7.....	\$5,355.....	Bachelor's degree plus 1 year of appropriate graduate work (30 semester hours), or Bachelor's degree plus 1 year of progressive research experience, or Bachelor's degree with college average of "B" or better, or standing in upper 25 percent of class.
GS-9.....	\$6,435.....	Bachelor's degree plus (a) 2 years of appropriate graduate work (60 semester hours) or (b) 2 years of progressive research experience, or Completion of all requirements for the master's degree in appropriate field within the past 2 years, and demonstrated superior ability in graduate studies, or D.V.M. degree.
GS-11....	\$7,560....	D.V.M. degree and 1 year of research experience; or completion of all require-

ments for the Ph. D. degree; or 3 years of progressively responsible research experience (or appropriate combination of experience and education) beyond the bachelor's degree level.

GS-12....\$8,955.....D.V.M. degree and 2 years of research experience. Completion of all requirements for the Ph. D. degree in an appropriate field within the past 2 years, and demonstrated superior ability in graduate studies; or 3 years of progressively responsible, highly specialized research experience (or appropriate combination of experience and education) beyond the bachelor's degree level.

Some undergraduates are employed by ARS as student assistants for full-time summer work and for part-time work during the school year. High school graduates who have been accepted

## ANIMAL DISEASE AND PARASITE RESEARCH DIVISION



by or enrolled in an accredited college or university in an appropriate curriculum may be eligible for appointment at the rate of \$3,500 a year; students with 1 full academic year of college, at \$3,760 a year; students with 2½ full academic years of college, at \$4,040 a year.

**Work locations:** The Animal Disease and Parasite Research Division has its headquarters at Beltsville, Md. Research is conducted in laboratories at Ames, Iowa; Plum Island, N.Y.; and Beltsville, Md. The Division employs scientists at 13 additional field stations and at three overseas stations.

## Professional Growth and Recognition

- Creative research environment.
- Modern research facilities.
- Association with outstanding scientists.
- Interdisciplinary associations.
- Individual professional recognition.
- Authorship for original research.
- Advanced training encouraged.

## Job Benefits

- Promotion based on achievement.
- Regular salary increases.
- 5-day, 40-hour workweek.
- Liberal vacation and sick leave with pay.
- Excellent retirement system.
- Low-cost life and health insurance.

## RESEARCH SCIENTISTS UTILIZED :

### VETERINARIANS

*Pathologists Physiologists*

*Cytologists Immunologists*

### PARASITOLOGISTS

### MICROBIOLOGISTS

### BIOCHEMISTS AND

### BIOPHYSICISTS

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Growth Through Agricultural Progress

